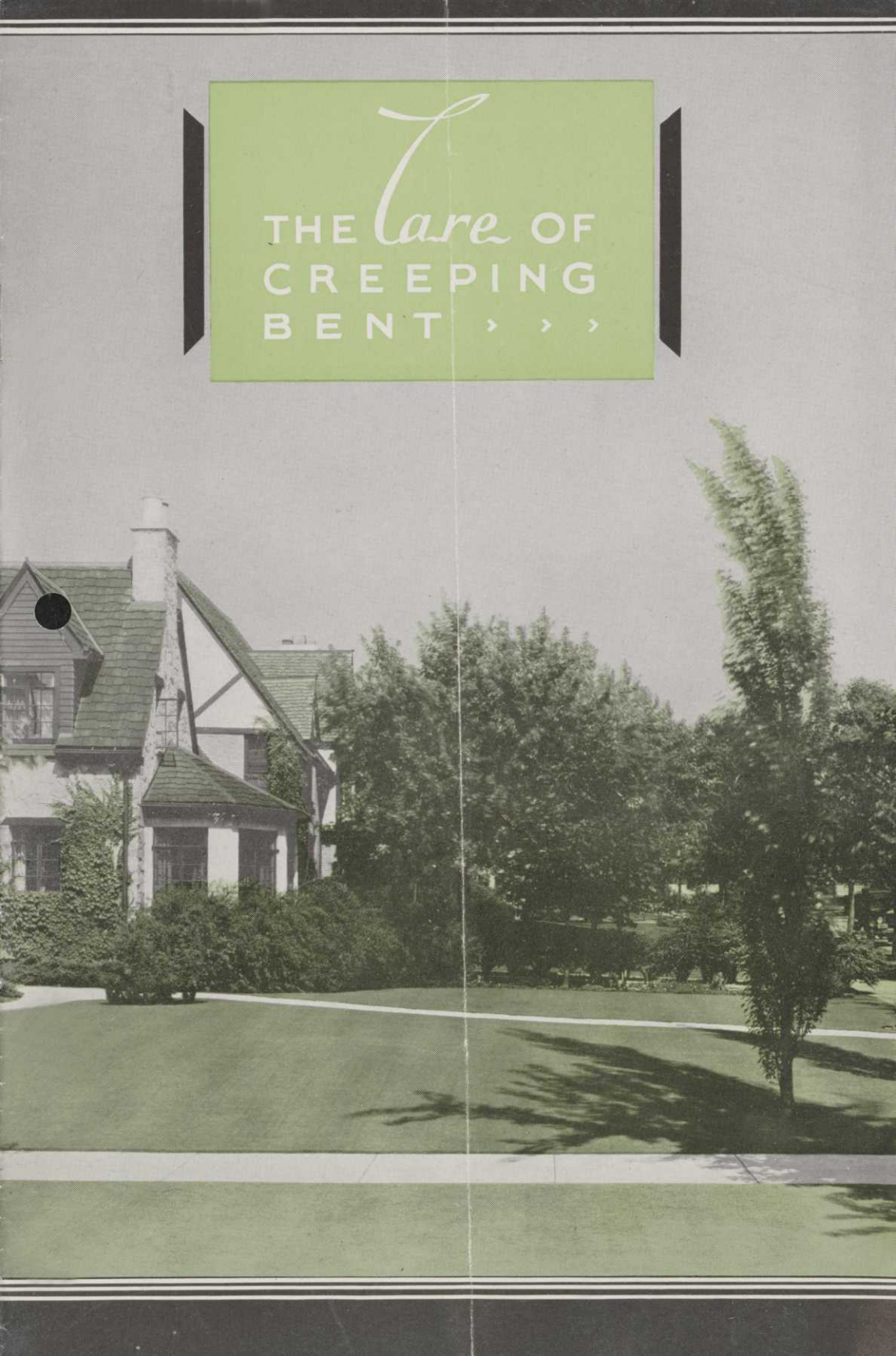
THE *Care* OF CREEPING BENT › › ›



Cover Page. Home and Creeping Bent lawn of D. E. Hollister, landscape architect, Milwaukee, Wis., started with Scott's Creeping Bent Stolons.

The Care of Creeping Bent

THE distinctive characteristic of Creeping Bent is its ability to spread over ground rapidly by means of creeping stems. These stems have joints at close intervals which, in contact with soil, develop new plants. Thus a single plant will start a succession of plants which may, in a few months, cover as much as a square foot of ground.

These creeping stems are commonly called stolons. They are propagated in special nurseries where the spreading characteristic is encouraged. At the proper stage the top and stem growth of this grass is taken up and prepared for use in the vegetative planting of Creeping Bent lawns.

In order to make it easier to plant Creeping Bent the stolons are shredded and chopped into pieces resembling grass clippings. Delivery is then arranged by express to avoid delays. By the time their destination is reached the stolons usually resemble dried grass clippings or hay but their viability is not injured. The buds from which new plants develop are in the joints, where they are protected by a sheath so that they remain alive for a considerable length of time. There is sometimes considerable heating in shipping but this seldom injures the protected buds.

Planting

The general recommendation is to plant Creeping Bent stolons for new lawns, and not try to start them in established turf. It is best to prepare an entirely new seed bed by plowing or spading.

Careful preparation is most important. It should be similar to the preparation for ordinary seeding, with a reasonably good garden loam to a depth of five or six inches. Facilities for removal of surplus water are necessary. This is accomplished by correct grading and installation of tile drainage when needed. As Creeping Bent needs more moisture than ordinary grasses there should be an abundance of humus in the soil. This may be added in the form of rotted manure, peat moss or other vegetable matter. (For complete description of soil preparation see our booklet "Lawns.")

As stolons require a light covering of soil after planting, a quantity of good screened soil must be provided. This topdressing material should be of a good loamy consistency and screened through a quarter inch mesh screen. The required amount is one cubic yard per 1000 square feet of planting area.

Creeping Bent will develop much faster if there is an abundant supply of quickly available plant food in the surface soil. To insure the presence of this we recommend Scott's Turf Builder at the rate of 20 pounds per 1000 square feet of planting area, raked into the upper inch of surface soil shortly before planting. If this raking is thorough, stolons can be planted with safety immediately afterwards.

No special equipment is necessary for planting Creeping Bent Stolons. Ordinary garden tools will suffice with the addition of a few medium size buckets for handling the stolons and top soil, together with a medium weight roller, and a hose with a spray nozzle for sprinkling. On a large area it is well to have a few boards which can be used to walk on so the prepared soil need not be disturbed.

Time of Planting

Stolons are available for shipment and may be planted with safety from early May until late in October. While summer seeding is not recommended it is safe to plant stolons all through hot weather, provided extra precautions are taken in watering. Sometimes summer plantings are covered with burlap since this reduces evaporation and protects the stolons from the burning sun. This can be removed as soon as the grass is rooted.

The best planting periods are May 1st to June 15th and August 1st to October 15th. As with sowing seed, fall is the most desirable season for planting stolons. Late fall plantings will not make much headway before winter but they will develop fast the following spring.

Shade Plantings

Creeping Bent will thrive in partially shaded locations as well as in those receiving full sun. It is not possible to lay down any

exact rule about this, but we consider any lawn that receives sunshine two or three hours per day suitable for Bent. For lawns receiving less sunshine we recommend Scott's Shade Mixture grass seed.

Severe slopes and terraces are not suitable for Creeping Bent as they do not allow the soil to absorb sufficient surface water. Moderate slopes may be planted if they are covered with coarse burlap until the stolons have sprouted and taken root.

Planting the Stolons

Whenever possible it is well to have all arrangements for planting completed before the stolons are received. While they can be kept for a week or more, it is best that they be planted as soon as possible.

The stolons received from us will be chopped ready for planting. They should be scattered evenly over the ground. Theoretically there should be one joint for each square inch of surface. Actually we ship enough stolons so that the ground may be practically covered with the grass.

Follow the scattering with a light rolling to press the stolons lightly into the soil. Next scatter the screened soil over the area, to provide about one-fourth inch covering. This will leave some of the grass exposed as the topdressing should not cover the grass completely. Follow with another rolling to firm the surface soil. Water should be applied immediately as a fine spray in such a way that the planted grass will not be disturbed.

Stolons should be covered and watered soon after scattering as exposure to direct rays of the sun is injurious. In planting a large area it is well to divide it into small sections and complete each section as quickly as possible.

Watering

Success with stolon plantings hinges largely on the amount of care exercised in watering. For the first two or three weeks, the surface soil must be kept moist 24 hours per day. If this is not done the stolons will perish since they are entirely dependent upon the surface water as they have no means of getting to the moisture supply of lower levels.

During days when the sun shines at all it is usually necessary to water at least four times per day. In general, this should be (1) early morning, (2) about ten or eleven o'clock, (3) again at two or three o'clock, and (4) late in the afternoon.

The ground should not be flooded, but only the upper inch of soil need be thoroughly moistened. As stated before, this frequency of watering should be continued for the first two or three weeks, or until the grass is well rooted. During this period it may be necessary to replace some topdressing which has been washed off by heavy rains or in the process of sprinkling.

Care After Planting

The first appearance of growth from Creeping Bent will not be the uniform, fine seedling growth as from seed plantings. Instead, just a few scattered spears will show. These will gradually increase until within a month or so there will be a fairly uniform development, but not a complete coverage. This is not accomplished until the grass puts out the creeping stems which form the solid turf.

Mowing

Regular cutting should start as soon as turf begins to form. It is best to cut Bent rather closely, setting the roller of the machine so that the bed knife is about one inch above the ground. The clippings from the first few mowings may be left on the ground and a light topdressing applied. Where there is a joint or node on any of the clippings a new plant may develop, thereby helping to thicken the turf and hasten it toward a finished condition. The grass should never be allowed to grow rank and tall, as it then becomes harder to get the turf down to a fine condition.

During wet seasons it may be necessary to mow Bent several times each week. Bent turf is improved by frequent mowings. After the ground is completely covered it is well to catch and remove the clippings.

Any ordinary mower, that is sharp and in good adjustment, is suitable for cutting Creeping Bent. Special mowers for Bent may be secured at prices ranging from $18.00 up. These mowers have six or seven blades so that they give a smoother cut. Practically all mower manufacturers now offer special machines for cutting Creeping Bent.

Weeding

After a Bent lawn is established there will be very little trouble with weeds. However, some weeds will certainly be present in the topsoil and these may sprout at the same

time as the stolons. If they are annuals there is no need of bothering them as close mowing together with the strength of the turf will kill them. If any perennials such as dandelions, chickweed, plantain and the like appear they should be dug or hand pulled.

Watering

As Bent requires more moisture than other grasses artificial watering must be resorted to at the first sign of dry weather. Daily light sprinklings should be avoided, but instead a thorough soaking once or twice per week is advised. This may be done any time during the day or night, although if there is any preference it is for early morning watering.

Topdressing Established Lawns

Because of the nature of growth of Creeping Bent it is advisable to give such turf one or more topdressings of good screened soil each year. Well rotted compost, as described below, is ideal for this purpose although any good weed-free loam soil may be substituted if compost is not available. Finely pulverized peat moss, coarse sand and loam soil make a good topdressing combination. They should be mixed in the ratio of one part each of sand and peat moss with two parts soil.

Probably the easiest way to topdress a lawn, without purchasing special equipment, is to dump the material in small piles and then spread it out over the turf, using the back of an iron rake. It can be worked down into the turf with the same implement or with a stiff straw push broom. Sometimes a flexible steel door mat is used. For the average lawn, topdressing should be at least one-fourth inch deep.. If the surface is very uneven as much as a half inch can be applied without smothering the grass. To cover each 1000 square feet of lawn area to a depth of a quarter inch about one cubic yard of material is needed.

It is not absolutely necessary to topdress a Bent lawn every year, but such treatment is very helpful to any kind of turf. Topdressing serves to true the surface and eliminate low, uneven places as well as provide a surface of new soil for the grass roots.

Early spring is a good time to apply topdressing, although the procedure may be equally helpful at any other time during the growing season. If desired, commercial fertilizer may be mixed with topdressing and applied in that way, but it is probably less laborious to broadcast the fertilizer separately.

The term "topdressing" is used in this pamphlet to describe the application of screened soil or compost to turf. Sometimes the term is loosely applied to the mere application of commercial plant foods. These are entirely different treatments. Neither eliminates the necessity of the other as they are used for different, yet supplementary purposes. Topdressing with soil improves the mechanical growing condition, whereas fertilizer adds quickly available plant food in chemical form.

Compost

Compost is an intimate mixture of humus-forming materials with soil and sand. After the materials are mixed the compost should be allowed to decompose for a period of time so that weed seeds are destroyed and the number of friendly soil bacteria increased. A good compost, containing a liberal quantity of organic matter, is not only favorable for the multiplication of bacteria which liberate plant food to grass, but it also promotes aeration of the soil. (For complete instructions on compost see "Lawn Care," Vol. VI, No. 1, February 1933.)

Fertilizing

As stated before, applications of topdressing do not eliminate the use of commercial plant foods. A Bent lawn should be fed at least once during the year, in spring or fall. A special grass food such as Scott's Turf Builder is recommended. The correct application of it is 10 pounds per 1000 square feet, put on when the grass is dry and immediately watered in well.

Winter Protection

There is nothing gained from the formerly prevalent practice of scattering manure or straw over a lawn in fall or late winter. Such a covering often smothers the grass and in addition adds many weed seeds to the soil. Allowing leaves to remain on the lawn during winter is very harmful.

We feel that the only winter protection for new lawns or old lawns is to let them go into the winter with a fairly long growth of grass, and to see to it that trespassers are kept off during winter as well as early spring.

Renovating Bent Lawns

Occasionally an unhealthy matted condition may develop in a Creeping Bent turf. Overfeeding, infrequent mowing, high cutting, lack of topdressing are all causes of matting. When there is too much top growth the grass chokes out in spots or shows brown after mowing because sunlight is excluded from the undergrowth. Sometimes Bent turf gets so thick that it loses all contact with the soil and can be literally picked up like a rug.

A condition of this kind is quickly remedied. The dense intertwining growth of stems and runners must be removed. This is accomplished by a severe raking of the turf with sharp tined steel rakes followed by close mowing. This operation should be repeated until the matted grass is thinned. A lawn will look bad after such treatment but the turf will come back quickly, and look better than before, if followed by an application of top-dressing and fertilizer as described on page four. Creeping Bent can be renovated in this way any time during the growing season although it will recover more quickly if the treatment is made during spring or early fall.

Pests and Diseases

In hot dry weather, Creeping Bent sometimes becomes brown and dead looking in spots, or in large areas. There are many possible causes, such as a matted top growth as described previously or damage by insect or animal pests. Or it may have been attacked by fungus diseases which sometimes become virulent during hot, muggy weather.

GRUBS

Certain insect pests and diseases attack Creeping Bent as well as other grasses. Of these the grubs of Japanese or Asiatic beetles are apt to be most troublesome, particularly in the eastern states. There is also some damage to turf by grubs of May beetles or June bugs, in the central and western states.

The first evidence of a grub attack is the browning of turf in spots. This is due to the action of the grubs in feeding on the grass roots just below the surface of the soil. In time they will sever all of the roots so that large pieces of sod can be lifted right off the ground.

Grubs are controlled by making applications of arsenate of lead at the rate of 5 pounds per 1000 square feet. One or two treatments per year will give complete control. A lawn may be grub-proofed when it is built if lead arsenate is incorporated into the seed bed at the rate of 25 pounds per 1000 square feet.

CHINCH BUGS

In recent years chinch bugs have damaged turf considerably, especially in the east. Large colonies of these pests destroy grass by sucking the juices from the plants. As they are true bugs they can only be controlled by contact poisons. Nicotine sprays show most promise in their control. Since there are two or more broods each year it is necessary to treat infested areas more than once. Usually early June and early August sprays will suffice.

The following table lists the most common insect and animal pests that damage Creeping Bent and other turf grasses and the issue of "Lawn Care" in which their control is discussed:

Earthworms	June-July, 1930
Grubs and Beetles	June-July, 1919
Web Worms	June-July, 1932
Chinch Bugs	September, 1933
Ants	September, 1930
Moles	June-July, 1931

Turf Diseases

This section is introduced mainly because we are anxious to make this a complete treatise on the maintenance of Creeping Bent. While control of diseases is considerable of a problem on golf course putting greens, it is infrequently such on lawns. It must be remembered that the turf on putting greens is growing under more or less unnatural conditions because of the demands for perfect turf throughout the playing season. This necessitates a great deal of unhealthy forcing. In contrast lawns are permitted to grow pretty much as nature intended so they are seldom attacked by disease.

Several different diseases may attack fine turf grasses. Most are caused by fungi which are normally present in a dormant state in soils everywhere. These fungi will spring into activity when climatic conditions are favorable. Generally this means temperature well above 85 degrees with relatively high humidity.

BROWN PATCH

The most common diseases are known as dollar spot and brown patch. The noticeable effect on grass is the same with both of them except that the injury from dollar spot is usually confined to many small areas, approximately the size of a silver dollar, while brown patch affects a few larger areas, roughly circular in shape. In a bad case either disease may eventually spread and damage all the grass on a large area so that the distinctive spots or patches are not apparent.

Usually the fungi of dollar spot or brown patch are most active at night. The first evidence of an attack can be seen in the early morning when the grass has a scalded, darkened appearance. As soon as the sun strikes this grass it begins to shrivel and soon becomes brown and dead looking. At first only the blades are attacked but if the disease is not checked by fungicides or a change in the weather the roots may also be killed.

After the disease has started it can be checked by applications of fungicides. A number of effective commercial fungicides are available, as described below.

Control

Mercury compounds are usually employed in the prevention or control of fungus diseases. A number of commercial products are available which carry the mercury in either organic or inorganic form. Among the organics are Semesan, Barbak, Nugreen and Curex. Two of the better known inorganics are Calo-Clor and Pfizer Mixture. If none of these commercial products is available the raw materials for an effective fungicide can be purchased at any drug store. These are calomel and corrosive sublimate, and should be mixed in the ratio of two parts calomel to one part corrosive sublimate. The commercial preparations are better, if available, since they are uniformly mixed and of finer texture.

Fungicides are either applied in dry form after mixing with sand or soil or in solution. The dry method is to be preferred generally, although the recommendation of the manufacturer should be followed.

In the wet method the required amount of fungicide for 1000 square feet is mixed with 50 gallons of water and the solution applied to the turf with a sprayer or sprinkling can.

In dry applications it is well to make the mixture several hours in advance of broadcasting as this lessens the danger of burning. Before mixing, the fungicide should be examined to see that there are no lumps. If present they should be pulverized with an improvised rolling pin or a similar implement. The fungicide should be blended thoroughly with the carrier and the mixture broadcast evenly over the infected turf.

We cannot over-emphasize the importance of following the manufacturer's directions in the rates of application. Too strong a mixture may result in severe burning particularly on warm, bright days. Wherever possible, treatments are advised on cloudy days or later in the afternoon after the sun has lost its heat. Unless very light applications are made the turf should be watered thoroughly immediately after treatment.

CAUTION. All of these mercury materials are highly poisonous. Extreme care should be exercised to keep animals and children away. Workmen handling the materials ought to wear gloves and avoid smoking because of the possibility of carrying the poison to the lips in handling the cigar or cigarette.

Prevention

Attacks of dollar spot and brown patch are so infrequent on lawns that it is hardly practicable to take any particular preventive measures. While golf course putting greens are treated with fungicides in anticipation of diseases, during weather favorable to them, we do not consider this necessary with lawns.

One treatment that may be worth while during periods of extreme heat and humidity is to brush the dew off Creeping Bent in the early morning. This may serve to break up the spread of the fungus if it made some development during the night. An ordinary broom will serve the purpose, or large lawns may be brushed quickly by whipping a long bamboo pole over the grass. One owner of a Bent lawn increased the effectiveness of his treatment by making a weak solution of fungicide and brushing this into the grass.

Restoring Injured Turf

In practically every case, injured Bent turf may be restored quickly because of the remarkable strength of the grass. Even though Bent may appear dead there will usually be plenty of live joints to repair the injury in a short time. This healing will be hastened if the turf is given a vigorous raking to remove the dead mat of grass. A topdressing with good screened soil should follow immediately and then a heavy watering. Such treatment will practically always restore Bent turf no matter what caused it to turn brown and regardless of whether or not any fungicides or other remedial measures were applied. Creeping Bent is truly a remarkable grass. It has almost magical powers of healing after injuries, and covering bare spots in turf regardless of what may have caused them.

Seeded Bent Lawns

Until recently the only way a true Creeping Bent lawn could be obtained was by planting stolons. Now, however, it is possible to get true Creeping Bent seed. While not recommended as highly as the stolons, the seed will in time produce similar turf. Stolons will produce mature turf on a new lawn in from six to ten weeks depending upon the weather, but seeded turf requires several months more to reach this stage. After the first year, lawns planted with pure Creeping Bent seed should be maintained in the manner prescribed in this book.